

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/019512

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C07C259/06, C07D209/22, 209/24, 211/58, 213/40, 235/16,
295/18, 401/04, 405/04, A23L1/30, A61K7/00, 31/164, 31/165,
31/167, 31/17, 31/18, 31/275, 31/405, 31/4184, 31/4402, 31/4453,
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C07C259/06, C07D209/22, 209/24, 211/58, 213/40, 235/16,
295/18, 401/04, 405/04, A23L1/30, A61K7/00, 31/164, 31/165,
31/167, 31/17, 31/18, 31/275, 31/405, 31/4184, 31/4402,
31/4453.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CA (STN), REGISTRY (STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	WO 02/00593 A2 (Sigma-Tau Industrie Farmaceutiche Riunite S.p.A.), 03 January, 2002 (03.01.02), & EP 1292563 A2 & JP 2004-501888 A & US 2003/195257 A1	1, 11-15 2-10, 16-19
X A	WO 02/00261 A2 (Monsanto Technology LLC), 03 January, 2002 (03.01.02), & US 2002/068693 A1 & US 2004/171521 A1	1 2-19
X A	JP 2003-523994 A (Smithkline Beecham PLC), 12 August, 2003 (12.08.03), & WO 2001/062715 A1 & EP 1265855 A1 & US 2003/134880 A1	1 2-19

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier application or patent but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

& document member of the same patent family

Date of the actual completion of the international search
01 July, 2005 (01.07.05)

Date of mailing of the international search report
19 July, 2005 (19.07.05)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/019512

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	WO 01/62296 A2 (Monsanto Technology LLC), 30 August, 2001 (30.08.01), & US 2001/046954 A1 & US 2004/171531 A1	1 2-19
X A	JP 2001-500533 A (Pharmacia & Upjohn S.p.A.), 16 January, 2001 (16.01.01), & WO 99/02510 A1 & EP 925289 A1 & US 6482827 B1	1,16-19 2-15
X A	JP 8-81443 A (Otsuka Pharmaceutical Co., Ltd.), 26 March, 1996 (26.03.96), & US 5594006 A	1,16-19 2-15
X A	WO 90/09380 A1 (Otsuka Pharmaceutical Co., Ltd.), 23 August, 1990 (23.08.90), & EP 411150 A1 & US 5238938 A	1,6-10 2-5,11-19
X A	JP 3-74370 A (Terumo Corp.), 28 March, 1991 (28.03.91), (Family: none)	1,11-15 2-9,16-19
X A	US 4077998 A (Morton-Norwich Products, Inc.), 07 March, 1978 (07.03.78), (Family: none)	1 2-19
X A	US 3950542 A (Oreal S.A.), 13 April, 1976 (13.04.76), & DE 1667903 A	1 2-19
X A	GB 1221238 A (Merck and Co.), 03 February, 1971 (03.02.71), & DE 1816103 A & US 3639382 A	1 2-19
X A	LEE, Jeewoo et al., Methionine analogs as inhibitors of methionyl-tRNA synthetase, Bioorganic & Medicinal Chemistry Letters, 1998, 8(24), 3511-3514	1 2-19
X A	VERLEYSEN, Katleen et al., Enantiomeric separation of some amino acids and derivatives by capillary electrophoresis with 18-crown-6- tetracarboxylic acid as chiral selector, Journal of Microcolumn Separations, 1999, 11(1), 37-43	1,6-10 2-5,11-19
X A	EL-EZABY, Mohamed S. et al., Complexes of hydroxamates. V: Equilibrium and kinetics of the formation of the binary and ternary complexes involved in the nickel(II)- histidinehydroxamic acid-pyridoxal system, Journal of Inorganic Biochemistry, 1988, 33(3), 161-174	1 2-19

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/019512

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2002/069965 A1 (Transtech Pharma, Inc.), 12 September, 2002 (12.09.02), & US 2003/032663 A1 & EP 1387680 A1 & JP 2004-523565 A	20-24

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/019512

Continuation of A. CLASSIFICATION OF SUBJECT MATTER

(International Patent Classification (IPC))

Int.Cl⁷ 31/4468, 31/454, A61P1/16, 3/10, 7/02, 9/10, 13/12, 19/02,
19/08, 19/10, 25/00, 25/28, 27/10, 27/12, 29/00, 37/00, 43/00

(According to International Patent Classification (IPC) or to both
national classification and IPC)

Continuation of B. FIELDS SEARCHED

Minimum documentation searched (International Patent Classification (IPC))

Int.Cl⁷ 31/4468, 31/454, A61P1/16, 3/10, 7/02, 9/10, 13/12, 19/02,
19/08, 19/10, 25/00, 25/28, 27/10, 27/12, 29/00, 37/00, 43/00

Minimum documentation searched (classification system followed by
classification symbols)

A. 発明の属する分野の分類 (国際特許分類 (IPC))

Int.Cl.⁷ C07C259/06, C07D209/22, 209/24, 211/58, 213/40, 235/16, 295/18, 401/04, 405/04

B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (IPC))

Int.Cl.⁷ C07C259/06, C07D209/22, 209/24, 211/58, 213/40, 235/16, 295/18, 401/04, 405/04

最小限資料以外の資料で調査を行った分野に含まれるもの

国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)

CA (STN) REGISTRY (STN)

C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
X A	WO 02/00593 A2 (Sigma-Tau Industrie Farmaceutiche Riunite S.p.A.) 2002.01.03 & EP 1292563 A2 & JP 2004-501888 A & US 2003/195257 A1	1, 11-15 2-10, 16-19
X A	WO 02/00261 A2 (Monsanto Technology LLC) 2002.01.03 & US 2002/068693 A1 & US 2004/171521 A1	1 2-19

☒ C欄の続きにも文献が列挙されている。☐ パテントファミリーに関する別紙を参照。

* 引用文献のカテゴリー

「A」 特に関連のある文献ではなく、一般的技術水準を示すもの

「E」 国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの

「L」 優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)

「O」 口頭による開示、使用、展示等に言及する文献

「P」 国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献

「T」 国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの

「X」 特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの

「Y」 特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの

「&」 同一パテントファミリー文献

国際調査を完了した日

01.07.2005

国際調査報告の発送日

19.7.2005

国際調査機関の名称及びあて先

日本国特許庁 (ISA/JP)

郵便番号100-8915

東京都千代田区霞が関三丁目4番3号

特許庁審査官 (権限のある職員)

本堂 裕司

電話番号 03-3581-1101 内線 3443

4H

9049

C (続き) . 関連すると認められる文献		
引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
X A	JP 2003-523994 A (スミスクライン ビーチャム パブリック リ ミテッド カンパニー)2003. 08. 12 & WO 2001/062715 A1 & EP 1265855 A1 & US 2003/134880 A1	1 2-19
X A	WO 01/62296 A2 (Monsanto Technology LLC) 2001. 08. 30 & US 2001/046954 A1 & US 2004/171531 A1	1 2-19
X A	JP 2001-500533 A (ファルマシア・エ・アップジョン・エッセ・ピ ー・アー) 2001. 01. 16 & WO 99/02510 A1 & EP 925289 A1 & US 6482827 B1	1, 16-19 2-15
X A	JP 8-81443 A (大塚製薬株式会社) 1996. 03. 26 & US 5594006 A	1, 16-19 2-15
X A	WO 90/09380 A1 (大塚製薬株式会社) 1990. 08. 23 & EP 411150 A1 & US 5238938 A	1, 6-10 2-5, 11-19
X A	JP 3-74370 A (テルモ株式会社) 1991. 03. 28 (ファミリーなし)	1, 11-15 2-9, 16-19
X A	US 4077998 A (Morton-Norwich Products, Inc.) 1978. 03. 07 (フ ァミリーなし)	1 2-19
X A	US 3950542 A (Oreal S. A.) 1976. 04. 13 & DE 1667903 A	1 2-19
X A	GB 1221238 A (Merck and Co.) 1971. 02. 03 & DE 1816103 A & US 3639382 A	1 2-19
X A	LEE, Jeewoo et al., Methionine analogs as inhibitors of methionyl-tRNA synthetase, Bioorganic & Medicinal Chemistry Letters, 1998, 8(24), 3511-3514	1 2-19
X A	VERLEYSEN, Katleen et al., Enantiomeric separation of some amino acids and derivatives by capillary electrophoresis with 18-crown-6-tetracarboxylic acid as chiral selector, Journal of Microcolumn Separations, 1999, 11(1), 37-43	1, 6-10 2-5, 11-19

C (続き) . 関連すると認められる文献		
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A	WO 2002/069965 A1 (Transtech Pharma, Inc.) 2002.09.12 & US 2003/032663 A1 & EP 1387680 A1 & JP 2004-523565 A	20-24

A. 発明の属する分野の分類（国際特許分類（IPC））の続き

A23L1/30, A61K7/00, 31/164, 31/165, 31/167, 31/17, 31/18, 31/275, 31/405, 31/4184, 31/4402, 31/4453, 31/4468, 31/454, A61P1/16, 3/10, 7/02, 9/10, 13/12, 19/02, 19/08, 19/10, 25/00, 25/28, 27/10, 27/12, 29/00, 37/00, 43/00

B. 調査を行った分野

調査を行った最小限資料（国際特許分類（IPC））の続き

A23L1/30, A61K7/00, 31/164, 31/165, 31/167, 31/17, 31/18, 31/275, 31/405, 31/4184, 31/4402, 31/4453, 31/4468, 31/454, A61P1/16, 3/10, 7/02, 9/10, 13/12, 19/02, 19/08, 19/10, 25/00, 25/28, 27/10, 27/12, 29/00, 37/00, 43/00